Guide for Administering the Grade 9 Assessment of Mathematics

Winter 2006

EQAO
Education
Quality and
Accountability
Office

Guide for Administering the Grade 9 Assessment of Mathematics

Winter 2006

106-01876/

Contents

Section 1: New and Important 1
- Purpose of the Guide 1
- What's New for Winter 2006 1
- The Importance of Barcodes 2
- Assessment Timeline 3
- The Assessment at a Glance 3
- Preparing Students for the Grade 9 Assessment of Mathematics 3

Section 2: Accommodations, Special Provisions and Exemptions 4
- Definitions 4
- Organization of This Section 4
- Role of the Principal 4
- Accommodations for Students with Special Needs 5
- Students with a Temporary Condition 7
- Students New to the School Board 8
- Other Accommodations (Not Covered Elsewhere in This Guide) 9
- Special Provisions for ESL or ELD Learners 10
- Human Resources: Scribes and Prompters 11
- Exemptions 13
- Special Versions 14
- Submitting Student Responses to Special Versions 15

Section 3: Overview 17
- Steps in Detail (SDC) 18
- Steps in Detail (Non-SDC) 26
- Teacher's Scripts 34
  - Orientation Script 34
  - Assessment Script 35

Appendix A—EQAO Policies 37

Appendix B—EQAO Information 39
- The Education Quality and Accountability Office 39
- Development of the Assessment 39

Appendix C—Formula Sheets and Glossaries for French Immersion 40

Appendix D—Sample Letters 41

Section 1: New and Important

Purpose of the Guide

This guide has been developed to help principals and teachers administer the Grade 9 Assessment of Mathematics. It is important to follow the procedures exactly as stated. This will ensure fairness to students by maintaining province-wide consistency before, during and after the administration of the assessment.

This guide is also available electronically at www.eqao.com.

What's New for Winter 2006

EQAO assessments continue to be streamlined in response to the Ensuring Quality Assessment initiative.

- The assessments are based on *The Ontario Curriculum, Grades 9 and 10: Mathematics* (revised 2005).
- Student-level data for schools in district school boards will be collected electronically through the Student Data Collection (SDC) process. For the rest of the schools (non-SDC), the data will be collected using paper versions of the Student Information Form (SIF) and the Class Tracking Sheet (CTS).
- Throughout the guide, where student information is required, SDC schools should update the information in the SDC, and schools using paper versions of the CTS and SIF should update the information on paper copies.
- All schools will receive **one** shipment of materials just prior to the administration of the assessment. The shipment will include the students' assessment materials, the Teacher Questionnaires and copies of this guide.
- There is one questionnaire and one Formula Sheet for students in the applied mathematics program and different versions for students in the academic program.
- Students will work in two booklets. Each booklet will contain both multiple-choice and open-response items. This year there will be **one** Student Answer Sheet for all the multiple-choice items.
- The assessment will comprise 27 multiple-choice questions, three multi-part open-response items and one single-part open-response item. Schools are requested to keep a copy of all Student Answer Sheets.
- Field-test items are embedded in the student booklets. Students' responses to these questions will not be included in their scores.
- The assessment is to be completed in **two 50-minute blocks.**
- Students identified as exempted will not receive any assessment materials.

The Importance of Barcodes

When preparing for the administration, schools must ensure that the last 12 digits of the barcode on the CTS match those on the student's booklets and in the student information (SDC or SIF).

Mismatched or Damaged Barcodes

- **If a student has not started writing the assessment** and finds that the last 12 digits of a barcode on any item in his or her package do not match those on other items in the package, call EQAO at 1-888-327-7377 for instructions.
- **If the student has already worked in one or more of the booklets in a package** and finds mismatched barcodes, cross out the mismatched barcode and clearly record the correct barcode number below it.
- **If the barcode has been damaged** on any of the booklets, the Student Answer Sheets, the SIF and the CTS (paper versions only) or the Student Questionnaire, clearly write the 22-digit barcode number on the front of the document.

For students affected by a barcode problem, return *all* booklets, Student Answer Sheets and Student Questionnaires (and SIF and CTS for non-SDC schools) in an envelope labelled "BARCODE PROBLEM." Include a note in the envelope, clearly explaining what has been done and stating the school's name and mident and the student's 22-digit barcode.

The alteration of barcodes may affect the accuracy of the student's Individual Student Report (ISR). For more help resolving barcode problems, please call EQAO at 1-888-327-7377.

Assessment Timeline

Order supplemental materials*	December 12, 2005–January 20, 2006
Receive shipment of assessment materials	January 3–4 or January 9–10, 2006
Administer the assessment	January 5–25, 2006
Pack and return assessment materials	No later than January 26, 2006
Scoring	July 2006
Provincial reporting	Fall 2006

*AVOID ORDERING AT THE LAST MINUTE, BECAUSE MATERIALS MAY NOT ARRIVE IN TIME.

The Assessment at a Glance

Administration Schedule		
Day 1: *Booklet 1*	Estimated Time	Allotted Time
Multiple-Choice Open-Response Multiple-Choice	40 min	50 min
Day 1: *Booklet 2*	Estimated Time	Allotted Time
Open-Response Multiple-Choice Open-Response	40 min	50 min

Note: Fifty minutes is allotted for the assessment in each of two mathematics periods. Additional time will be required to distribute materials and provide instruction.

Preparing Students for the Grade 9 Assessment of Mathematics

Check the links on the EQAO Web site, www.eqao.com.

- Release materials: samples of the types of items students will be completing on the assessment
- Formula Sheet: measurement formulas
- Key Words: explanations of the types of responses required from students

Section 2: Accommodations, Special Provisions and Exemptions

This guide is based on the Ministry of Education policy document *Individual Education Plans: Standards for Development, Program Planning, and Implementation*, available at www.edu.gov.on.ca.

Definitions

"Modifications" are changes to content and to performance criteria. Modifications are not permitted, because they would affect the validity and reliability of the assessment.

"Accommodations" are supports and services that enable students with special needs to demonstrate their competencies in the skills being measured by the assessment. Accommodations change only the way in which the assessment is administered or the way in which the person assessed responds to the components of the assessment. They do not alter the content of the assessment or affect the validity or reliability of the assessment.

Clarification of instructions for all students is permitted prior to the assessment. Clarification of questions (e.g., rewording or explaining) is **not** allowed.

"Exemptions" are decisions made for students who are unable to participate in the assessment even with accommodations.

Organization of This Section

The headings "The Student," "Decision Making," "Required Documentation" and "Notes" are used for each of the following topics:

- accommodations for
  - students with special needs
  - students with a temporary condition
  - students new to the school board
- other accommodations (not covered elsewhere in this guide)
- special provisions for English as a second language (ESL) or English literacy development (ELD) learners
- exemptions

Role of the Principal

The principal is responsible for making decisions about student participation in the assessment and ensuring that any accommodation, special provision or exemption is documented according to the instructions in this guide.

Accommodations for Students with Special Needs

The Student

The student has an Individual Education Plan (IEP) that outlines the accommodations that are necessary for and consistent with regular classroom assessment practices.

Decision Making

Decide on the accommodations

- based on the student's IEP,
- prior to the assessment,
- for each student individually and
- in consultation with the student and parents, and with the appropriate teaching staff.

Permitted Accommodations

Permit only the accommodations listed below that the student regularly receives when doing assessments.

Setting (adjustments to the environment in which the assessment is written)

- ☐ an individual or small-group setting or an individual study carrel
- ☐ preferential seating within the regular classroom
- ☐ assistive devices or adaptive equipment (e.g., special lighting, special pens or pencil grips or a device to support the student's arm for printing, writing or keyboarding)
- ☐ prompts for students with severe attention problems who are off-task for significant periods of time, solely to draw their attention back to the assessment

Timing (adjustments to the time suggested for the assessment)

- ☐ additional time, to a maximum of double the allotted time
- ☐ periodic supervised breaks

Presentation Format (adjustments to the format of the assessment)

- ☐ sign language or an oral interpreter*
- ☐ Braille version
- ☐ large-print version (no Student Answer Sheet)
- ☐ coloured-paper version
- ☐ large-print coloured-paper version (no Student Answer Sheet)
- ☐ audio version (CD or tape)
- ☐ verbatim reading of the instructions and/or questions
- ☐ assistive devices and technology resources (e.g., text-to-speech software or augmentative or alternative communication systems)

Response Format (adjustments to the format of responses)

- ☐ audiotaping of responses (for later transcription)
- ☐ verbatim scribing of responses
- ☐ use of a computer or word processor for responses (with spell checker)
- ☐ assistive devices and technology resources (e.g., a speech synthesizer, a Brailler, speech-to-text software or augmentative or alternative communication systems)

* An oral interpreter mouths words for deaf or hard-of-hearing students so that they can lip-read. The interpreter does not vary from the approved administration script or the assigned tasks.

Required Documentation

- ☐ student information (SDC or SIF)
- ☐ an information letter from the principal to the parents (see Appendix D)
- ☐ other applicable correspondence

File all documentation in the student's Ontario Student Record (OSR).

Notes

- Do not deduct the duration of the breaks from the time allotted.
- The student must complete the assigned booklet by the end of each assessment day.
- Consider an exemption if it is determined that the student will not be able to participate in the assessment, even with accommodations.

Students with a Temporary Condition

The Student

The student would not normally require accommodations but has a temporary condition, e.g., a hand injury that prevents him or her from writing or using a keyboard.

Decision Making

Decide on the accommodations

- prior to the assessment and
- for each student individually.

Permitted Accommodations

The principal may grant permission for accommodations according to the section "Accommodations for Students with Special Needs."

Required Documentation

The request for accommodation **has been** approved by the principal:

- ☐ student information (SDC or SIF)
  - Under "Special Permission," indicate that the student has the principal's permission for accommodations due to a temporary injury or condition.
  - Indicate the accommodations provided.
- ☐ a letter or record of request for accommodation from the parents to the principal
- ☐ other applicable correspondence

File all documentation in the student's OSR.

In the event that the principal **does not** approve the request for accommodation, related documentation may be filed in the student's OSR.

Notes

- Consider an exemption if it is determined that the student will not be able to participate in the assessment, even with accommodations.

Students New to the School Board

The Student

The student has transferred into the school from another school board, province or country shortly before the assessment, and there is no time to develop an IEP. There is documentation to show that accommodations are necessary.

Decision Making

Decide on the accommodations

- prior to the assessment,
- for each student individually and
- in consultation with the student and parents, and with the appropriate teaching staff.

Permitted Accommodations

The principal may grant permission for accommodations according to the section "Accommodations for Students with Special Needs."

Required Documentation

The request for accommodation **has been** approved by the principal:

- ☐ student information (SDC or SIF)
  - Under "Special Permission," indicate that the student has the principal's permission for accommodations due to recent arrival from another school.
  - Indicate the accommodations provided.
- ☐ a letter or record of request for accommodation from the parents to the principal
- ☐ a letter from the principal to the parents
- ☐ other applicable correspondence

File all documentation in the student's OSR.

In the event that the principal **does not** approve the request for accommodation, related documentation may be filed in the student's OSR.

Notes

- Consider an exemption if it is determined that the student will not be able to participate in the assessment, even with accommodations.

Other Accommodations (Not Covered Elsewhere in This Guide)

The Student

A student's parents request an accommodation that is not listed in this guide (e.g., more than double the time suggested for the assessment).

Decision Making

Decide on the accommodations

- prior to the assessment and
- for each student individually.

Submit to the Chief Assessment Officer of EQAO

- a letter or e-mail record of the request for special consideration from the parents and
- a brief description of the documentation that identifies the student's special needs (e.g., psychological or medical reports).

See "Notes."

Permitted Accommodations

The principal may grant permission for other accommodations only when approved in writing by EQAO's Chief Assessment Officer (CAO).

Required Documentation

- ☐ written approval (for the accommodation) from the CAO
- ☐ any other related correspondence

File all documentation in the student's OSR.

Notes

When a parent or principal identifies the need for an accommodation that is not listed in this guide or involves more than double the time allotted for the assessment, that conforms to the definition of accommodations in this guide, and that is described in the student's IEP, the parent or principal must submit the request for consideration to the CAO of EQAO. The decision of the CAO is final.

Chief Assessment Officer
Education Quality and Accountability Office
2 Carlton Street, Suite 1200
Toronto ON M5B 2M9

EQAO Information Centre: 1-888-327-7377
E-mail: e-mail@eqao.com

Special Provisions for ESL or ELD Learners

The Student

The student

- is enrolled in ESL or ELD courses at Level 1, 2, 3 or 4 or ESL Level 5 (Bridge to English) or
- would qualify for ESL or ELD courses if they were offered at the school.

Decision Making

Decide on the special provisions

- prior to the assessment,
- for each student individually and
- in consultation with the student and parents, and with the appropriate teaching staff.

Permitted Special Provisions

Setting (adjustments to the environment in which the assessment is written)

- ☐ an individual or small-group setting or an individual study carrel

Timing (adjustments to the time allotted for the assessment)

- ☐ additional time to a maximum of double the allotted time
- ☐ periodic supervised breaks

Presentation Format (adjustments to the format of the assessment)

- ☐ verbatim reading of instructions and/or questions

Required Documentation

- ☐ student information (SDC or SIF)
- ☐ an information letter from the principal to the parents outlining the special provisions approved (see Appendix D)
- ☐ other applicable correspondence

File all documentation in the student's OSR.

Notes

- Do not provide special provisions to students who have **completed** ESL/ELD Level 5 (Bridge to English).
- Do not deduct the duration of the breaks from the time allotted.
- The student must complete the assigned booklet by the end of each assessment day.
- ESL/ELD learners who have special education needs are also entitled to accommodations in accordance with the section "Accommodations for Students with Special Needs."

Human Resources: Scribes and Prompters

Note

A scribe or a prompter is someone who supports the accommodations the student receives. Scribes and prompters must not be relatives of the students they are assisting.

Guidelines

The person must

- ☐ follow the guidelines in this guide, including the requirement to report child abuse;
- ☐ work under the supervision of a teacher, unless he or she is a teacher;
- ☐ adhere to the security requirements and
- ☐ not provide students with any assistance that compromises the validity of the assessment; that is, he or she must not provide assistance that helps the student understand the questions or formulate answers.

Scribes

The role of the scribe is to write, type or word-process the student's dictated answers.

Scribes are allowed to

- ☐ write, by hand or using a typewriter or computer, the student's answers exactly as they are dictated;
- ☐ fill in the circles on the student's Student Answer Sheet;
- ☐ for large-print only, circle the student's responses to multiple-choice questions in the booklets and
- ☐ read back what has been recorded, at the student's request.

Scribes are not allowed to

- ☐ assist the student in formulating answers to the questions,
- ☐ give any assistance or suggestions related to the content of the assessment or
- ☐ give advice related to the order of the questions or the time to be spent on them.

Prompters

A prompter is allowed for students with severe attention difficulties if supervised breaks will not adequately accommodate the student's needs.

Prompters are allowed to

- ☐ draw the student's attention back to the assessment through a tap on the arm, shoulder or desk or
- ☐ use a verbal signal, for example a word or phrase, to redirect the student's attention.

Prompters are not allowed to

- ☐ clarify, explain or comment on the questions or
- ☐ draw the student's attention to a specific part of the assessment booklet.

Exemptions

The Student

The student is unable to participate in the assessment even with accommodations or special provisions.

Decision Making

Decide on an exemption

- in consultation with the student and parents, and with the appropriate teaching staff;
- with the consent of the parents;
- prior to the administration of the assessment and
- for each student individually.

If the parents want their son or daughter to write the assessment, the student must be allowed to write.

Required Documentation

- ☐ student information (SDC or SIF)
- ☐ a letter from the parents requesting exemption, or a record of parental consent if exemption has been initiated by the school
- ☐ a copy of the principal's letter to the parents informing them of the exemption (see Appendix D)
- ☐ any other related correspondence

File all documentation in the student's OSR.

Note: Student materials (booklets, etc.) will not be shipped for exempted students.

Special Versions

If sufficient numbers of special versions have not been ordered, call EQAO (1-888-327-7377) and order supplemental special versions.

Under no circumstances may special versions be photocopied for use by other students.

Special Versions
Contracted Braille plus a set of regular-print booklets for the scribe's use
Large-print booklets—white paper
Large-print booklets—blue, green or yellow paper
One hard copy, single-sided, to be scanned for use with assistive devices and technology resources such as text-to-speech software, plus the required sets of regular-print student booklets
Regular-print booklets—blue, green or yellow paper
Audio CD plus a set of regular-print booklets
Audio CD plus a set of large-print booklets
Audio tape plus a set of regular-print booklets
Audio tape plus a set of large-print booklets

Submitting Student Responses to Special Versions

After the assessment has been completed, handle the different student response formats according to the chart below.

Response format	Special instructions	What to return to EQAO and how	What to keep at the school
Audiotaped responses	• Clearly state the full 22-digit barcode at the beginning of each taping session. • Clearly print the full 22-digit barcode on each audio tape.	• Place the student's audio tapes with the student's regular-print or large-print booklets inside the large white envelope provided. • Seal the envelope and label it "Audio Response." • Return the envelope with the remainder of the assessment materials.	
Scribed responses	• Responses scribed by hand should be written directly in the corresponding booklets. • Complete the Student Answer Sheet. • For word-processed or typewriter scribing, follow the procedures outlined in "Computer responses" below.	• Return the booklets and Student Answer Sheets with the remainder of the assessment materials.	
Computer responses	• Type the student's name and full 22-digit barcode in the header of the document. • Save the file to a disk, using the student's 22-digit barcode as the file name. • Label the disk with the student's name and full 22-digit barcode.	Printout: • Print the student's answers and staple the pages to the inside front cover of the corresponding assessment booklet. Disk: • If you prefer to send the disk, make a copy of it, then place it in the large white envelope provided with the student's booklets. • Seal the envelope and label it "Disk Response" and indicate the software used. • Return the envelope with the remainder of the assessment materials.	• Retain a copy of the disk in a secure place. • Schools are to delete the material from the disks one year after the date of the assessment.

Response format	Special instructions	What to return to EQAO and how	What to keep at the school
Braille responses	• Clearly print the full 22-digit barcode at the top of each response page. • Staple the student's Braille responses to the inside front cover of the student's regular-print booklets.	• Place the regular-print booklet inside the front cover of the corresponding Braille booklet. • Return the materials with the remainder of the assessment materials.	
Braille transcriptions	• Handwritten transcriptions should be made directly in the corresponding booklets. • Complete the Student Answer Sheet. • For word-processed transcriptions, follow the procedures outlined in "Computer responses" on the previous page.	• Place the student's regular-print booklets inside the front cover of the corresponding Braille booklets. • Return the materials with the remainder of the assessment materials.	
Presentation format	**Special instructions**	**What to return to EQAO and how**	**What to keep at the school**
Large-print versions	Large-print booklets do not have a Student Answer Sheet. Students circle multiple-choice responses in the booklets.	Return the materials with the remainder of the assessment materials	

Section 3: Overview

Before the Administration

Plan for the administration.

Review this training material.

Prepare the CTS and student information (SDC or SIF).

During the Administration

Read the Teacher's Scripts.

Distribute materials.

Collect materials.

Maintain the security of the materials.

After the Administration

Keep copies of the Student Answer Sheets.

Non-SDC schools only: Keep copies of the CTSs and SIFs.

Prepare the materials for return to EQAO.

Steps in Detail (SDC)

If your school is using paper versions of the SIF and CTS, turn to Steps in Detail (non-SDC) on page 26.

If your school and board are following the SDC process, follow the steps below. For help accessing or updating information on the SDC system, please refer to the Instructions for Using the Student Data Collection System on the secure portion of EQAO's Web site.

	SDC		Responsibility Checklist	
STEP 1	Exemptions	**November 14–25** • Read the section in this guide on exemptions. It is available at www.eqao.com, and a copy for each teacher is shipped with the assessment materials. • Identify students for whom exemptions should be recommended. Select "No materials required (exempted)" as the material type. Note: Student materials will not be shipped to your school for exempted students. • Send letters regarding exemptions to their parents. • File the signed letters the parents return.	■	
STEP 2	Accommodations and special provisions	**November 14–25** • Read the section in this guide on accommodations and special provisions. • Identify students with IEPs who need accommodations. • Identify students enrolled in ESL/ELD who need special provisions. • Communicate with the students' parents. • Arrange the necessary support.	■	
STEP 3	Special versions	**November 14–25** Use the SDC application to select the materials for students who require special versions.	■	
		November 28–December 2 **The SDC is not available to schools while EQAO assigns student barcodes and creates CTSs.**		

LEGEND: Principal ■ Teacher ●

		SDC	Responsibility Checklist	
STEP 4	Student information and CTS	**December 5, 2005–January 25, 2006** • Use the SDC application to enter the data for each student who will receive one or more accommodations, special provisions or special permissions or who will be exempted. • Review the data for accuracy and make any necessary changes. • If there are corrections to be made to the name or OEN, call EQAO for directions. • Delete students no longer enrolled in a first-semester mathematics class. • Transfer students between classes as necessary, due to program change, for example. • Add newly arrived students enrolled in first-semester mathematics. • Print the CTS and store it in a secure location.		
STEP 5	Schedule	• Plan the administration schedule. • Fifty minutes in each of two mathematics periods is allotted for the assessment. • Additional time will be required to distribute the materials and provide instruction.		
STEP 6	Assessment materials	• The shipment will arrive January 3–4 or January 9–10, 2006. It will contain copies of this guide, the Teacher Questionnaires and all student assessment materials. • **Immediately** verify the contents. Call EQAO at 1-888-327-7377 if additional materials are required. • Do not open the individual student packages. **Note:** You will not receive paper copies of CTSs and SIFs.		

LEGEND: Principal Teacher

	SDC		Responsibility Checklist	
STEP 7	Security	• Keep the materials strictly confidential; do not photocopy them. • Ensure that students, teachers and others who are not involved in the assessment have no contact with the materials. • Notify EQAO immediately (1-888-327-7377) if a security breach is suspected.		
STEP 8	In-school marking	• Identify the components (if any) to be marked in the school. • You may **not** photocopy the booklets for marking or any other purpose. And you may not make **any** marks in the students' booklets. • Use the package of materials marked TEACHER for in-school marking. This package **must** be returned to EQAO along with all other assessment materials.		
STEP 9	The guide	• Distribute the *Guide for Adminstering the Grade 9 Assessment of Mathematics* to teachers and support staff. • Read the guide.		
STEP 10	Training	• Arrange individual or group sessions to review this guide before the administration. • Make sure everyone understands the scripts and the procedures to follow. This will ensure consistency in administration across the province.		
STEP 11	Teacher Questionnaire	• If you are teaching both applied and academic classes, complete **one** questionnaire—for the **larger** number of students you teach. • Follow the instructions for completing the questionnaire. • Return your completed questionnaire to the principal (use a sealed envelope labelled "Teacher Questionnaire" for confidentiality).		

LEGEND: Principal Teacher

		SDC	Responsibility Checklist	
STEP 12	Assessment room	• Arrange for an appropriate room with sufficient seating to ensure that students work independently. • Remove from view any mathematics material that is instructional in nature, such as definitions of mathematical terms. • Review the Key Words sheet and post them.	■	●
STEP 13	Verification of CTSs	• Verify that all students are listed on the CTSs. • From the SDC, print the CTS for each class.	■	
STEP 14	Distribution of forms and assessment materials to teachers	• Distribute the CTSs along with the relevant applied and/or academic booklets to the teachers administering the assessment. • Do not open the individual student packages. • Ensure that a scientific or graphing calculator is available for each student.	■	
STEP 15	Distribution of assessment packages to students	• Use the CTS to distribute student packages. • Ask the students to check that the last 12 digits of the barcode on **all** of their items match. **Note: Do not attempt to change barcodes.** It is very important that they not be altered, as alteration will affect the accuracy of the student's score. On rare occasions barcodes are mismatched. If this occurs, call EQAO at 1-888-327-7377 and say that you have a barcode problem. • Ensure that you have received the correct materials for your class. • Ensure that a scientific or graphing calculator is available for each student. • Distribute the applied and/or academic booklets to the appropriate students.		●

LEGEND: Principal ■ Teacher ●

		SDC	Responsibility Checklist	
STEP 15 Cont'd	Distribution of assessment packages to students	• Have the students check that they have the following: – a Student Questionnaire – a Formula Sheet – a Student Answer Sheet – *Booklet 1* and *Booklet 2* – an envelope – for French Immersion classes only: a *Glossaire de termes mathématiques* **Note:** Large-print packages do not include a Student Answer Sheet. The students circle their multiple-choice responses in the booklets. **Note:** A teacher's package of assessment materials is provided. This is the first package listed on the CTS. **Do not allow a student to use this package unless EQAO expressly gives permission.** **Note:** If a student's package is incomplete, or if you require additional materials, call EQAO at 1-888-327-7377.		●
STEP 16	Orientation and questionnaire	**Orientation** • Follow the Teacher's Script in this guide. Allow approximately 30 minutes. **Student Questionnaire** • Read the instructions in the Teacher's Scripts, emphasizing the correct way to indicate answers. • The questions may be read to the students. • Collect the completed Student Questionnaires and store them in a secure location.		●

LEGEND: Principal ■ Teacher ●

		SDC	Responsibility Checklist	
STEP 17	Envelope collection	• Have the students label their envelopes and place all assessment materials inside. • Collect the envelopes and store them in a secure location.		●
STEP 18	Administration: Day 1 and Day 2	• Hand out the envelopes containing the assessment. • Read the Teacher's Scripts to the students, excluding the italicized parts. • Never leave your room unattended once the materials are distributed. In case of emergency, instruct the students to leave their materials on their desks and to exit immediately. When they return, instruct them to return to work. • Remind the students to plan their time so that they can complete each component. • Do not translate or explain terms. • Do not influence the students' responses. • Do not correct the students' work during the assessment. • As the students work through the assessment, encourage them to attempt all items. All unanswered items will be scored zero. • Have materials and activities available for those who finish early. • At the end of Day 2, collect each of the **booklets** and the **Student Answer Sheets** separately. Remove the materials from the student envelopes.		●

LEGEND: Principal ■ Teacher ●

		SDC	Responsibility Checklist	
STEP 19	In-school marking	• Do not write any comments or make any marks in the booklets. • Do not photocopy students' booklets. • Keep a copy of the Student Answer Sheets.		●
STEP 20	Return of assessment materials to principal	• Bundle all Student Answer Sheets. • Bundle all Student Questionnaires. • **Ensure all booklets are removed from the students' envelopes.** • Bundle all completed *Booklet 1*s with an elastic. • Bundle all completed *Booklet 2*s with an elastic. • Bundle the teacher booklets, whether used for in-school marking or not. • Include the completed Teacher Questionnaire. • Bundle all unused student packages.		●
STEP 21	Preparation of assessment materials for return to EQAO	• Review the SDC to ensure it is complete and accurate. • Indicate on the Packing/Return List the total quantity of each item being returned. The quantities returned must equal the quantities received by the school. • Photocopy the following and keep the copies on file: – the completed Packing/Return List – the Student Answer Sheets • Keep the following on file: – the CTS and student information for each class, printed from the SDC **(do not return these to EQAO)** – the signed consent forms for the exempted students • Include the original Packing/Return List with the materials being returned.	■	

LEGEND: Principal ■ Teacher ●

	SDC		Responsibility Checklist	
STEP 21 Cont'd	Preparation of assessment materials for return to EQAO	• Bundle the original Student Answer Sheets for all classes and put them in the Student Answer Sheet envelope. • Bundle all *Booklet 1*s together and *Booklet 2*s together. • Place all assessment booklets, Student Answer Sheet envelopes, teacher booklets (whether used for in-school marking or not), Student Questionnaires, Teacher Questionnaires and unused student packages in the tote box(es) provided. Fill any free space with the original packing material. • Affix the Return Service label(s) to the tote box(es), ensuring that the ID number on the label matches the one on the tote box.	■	
STEP 22	UPS	• Seal the tote box(es) as indicated on the Return Shipping Instructions (UPS). • Call UPS for pickup on completion of the assessment and no later than January 26, 2006: 1-800-742-5877. • Record the date of the pickup and the shipment tracking number. • Keep a copy of the UPS waybill.	■	

LEGEND: Principal ■ Teacher ●

Steps in Detail (Non-SDC)

Follow these Steps in Detail if your school is using paper versions of the SIF and CTS.

		Non-SDC	Responsibility Checklist	
STEP 1	School Verification Report	**November 7–18** • Log in at www.eqao.com and complete the SVR online. **Note:** New for this year is the "Student Information Form only (for exempted students)" option. No booklets will be shipped to the school for these students.	■	
STEP 2	Schedule	• Plan the administration schedule. • Fifty minutes in each of two mathematics periods is allotted for the assessment. • Additional time will be required to distribute the materials and provide instruction.	■	
STEP 3	Assessment materials	• The shipment will arrive January 3–4 or January 9–10, 2006. It will contain copies of this guide, the Teacher Questionnaires, the CTSs and SIFs, and all student assessment materials. • Verify the contents. Call EQAO at 1-888-327-7377 if additional materials are required. • Do not open the individual student packages.	■	
STEP 4	Security	• Keep the materials strictly confidential; do not photocopy them. • Ensure that students, teachers and others who are not involved in the assessment have no contact with the materials. • Notify EQAO immediately (1-888-327-7377) if a security breach is suspected.	■	●
STEP 5	In-school marking	• Identify components (if any) to be marked in the school. • You may **not** photocopy the booklets for marking or any other purpose. And you may not make **any** marks in the students' booklets.	■	●

LEGEND: Principal ■ Teacher ●

Non-SDC			Responsibility Checklist	
STEP 5 Cont'd	In-school marking	• Use the package of materials marked TEACHER for in-school marking. This package **must** be returned to EQAO along with all other assessment materials.	■	●
STEP 6	The guide	• Distribute the *Guide for Administering the Grade 9 Assessment of Mathematics* to teachers and support staff. The guide is also available at www.eqao.com. • Read the guide.	■	●
STEP 7	Exemptions	• Review the sections in the guide on exemptions. • Identify students for whom exemptions should be recommended. • Send letters regarding exemptions to their parents. • File the signed letters the parents return.	■	
STEP 8	Accommodations and special provisions	• Review the sections in this guide on accommodations and special provisions. • Identify students with IEPs who need accommodations. • Identify students enrolled in ESL/ELD who need special provisions. • Communicate with the students' parents. • Arrange the necessary support.	■	●
STEP 9	CTSs	• The CTS is the record EQAO uses to produce student reports. • For classes with students in both applied and academic programs, a separate CTS is provided for each program. • Use your class list to account for every student registered in the class. • Neatly print each student's first and last names and OEN beside a student barcoded ID number.	■	●

LEGEND: Principal ■ Teacher ●

		Non-SDC	Responsibility Checklist	
STEP 9 Cont'd	CTSs	• You may use labels that will fit the allotted space (4" × 1"), printed in 10-point font or larger. • Do not list students in locally developed (essentials) programs on the CTS. • Do include students who will be exempted. • Keep the completed CTSs locked away when not in use for the administration.	■	●
STEP 10	SIFs	• The student barcoded ID numbers on the SIFs are in the order in which they appear on the CTS. • Complete a SIF for each student recorded on the CTS, making sure that the last 12 digits of the student barcode on the SIF and CTS match. • Ensure that exemptions are indicated on the SIF as appropriate. • Complete the SIFs prior to the assessment. • Keep the completed SIFs locked away when not in use for the administration.	■	●
STEP 11	Training	• Arrange individual or group sessions to review this guide before the administration. • Make sure everyone understands the scripts and the procedures to follow. This will ensure consistency in administration across the province.	■	●
STEP 12	Teacher Questionnaire	• If you are teaching both applied and academic classes, complete **one** questionnaire—for the **larger** number of students you teach. • Follow the instructions for completing the questionnaire. • Return your completed questionnaire to the principal (use a sealed envelope labelled "Teacher Questionnaire" for confidentiality).		●

LEGEND: Principal ■ Teacher ●

		Non-SDC	Responsibility Checklist	
STEP 13	Assessment room	• Arrange for an appropriate room with sufficient seating to ensure that students work independently. • Remove from view any mathematics material that is instructional in nature, such as definitions of mathematical terms. • Review the Key Words sheet and the Formula Sheet and post them.	■	●
STEP 14	Verification of CTSs and SIFs	• Examine all classes' forms to ensure that the last 12 digits of the CTS barcode match the last 12 digits of the student's SIF barcode. • If a student listed on the CTS is no longer enrolled in the class, cross the name off the CTS. Put an X through the entire front of the SIF and write "VOID" across it in large letters.	■	
STEP 15	Distribution of forms and assessment materials to teachers	• Distribute the CTSs and SIFs along with the relevant applied and/or academic booklets to the teachers administering the assessment. • Do not open the individual student packages. • Ensure that a scientific or graphing calculator is available for each student.	■	●
STEP 16	Distribution of the assessment packages to the students	• Use the CTS to distribute student packages. • Ask the students to check that the last 12 digits of the barcode on **all** of their items match. **Note: Do not attempt to change barcodes.** It is very important that they not be altered, as alteration will affect the accuracy of the student's score. On rare occasions barcodes are mismatched. If this occurs, call EQAO at 1-888-327-7377 and say that you have a barcode problem. • Ensure that you have received the correct materials for your class. • Ensure that a scientific or graphing calculator is available for each student.		●

LEGEND: Principal ■ Teacher ●

		Non-SDC	Responsibility Checklist	
STEP 16 Cont'd	Distribution of the assessment packages to the students	• Distribute the applied and/or academic booklets to the appropriate students. • Have the students check that they have the following: – a Student Questionnaire – a Formula Sheet – a Student Answer Sheet – *Booklet 1* and *Booklet 2* – an envelope – for French Immersion classes only: a *Glossaire de termes mathématiques* **Note:** Large-print packages do not include a Student Answer Sheet. The students circle their multiple-choice responses in the booklets. **Note:** A teacher's package of assessment materials is provided. This is the first package listed on the CTS. **Do not allow a student to use this package unless EQAO expressly gives permission.** **Note:** If a student's package is incomplete, or if you require additional materials, call EQAO at 1-888-327-7377.		●
STEP 17	Orientation and questionnaire	**Orientation** • Follow the Teacher's Script in this guide. Allow approximately 30 minutes. **Student Questionnaire** • Read the instructions in the Teacher's Scripts, emphasizing the correct way to indicate answers. • The questions may be read to the students. • Collect the completed Student Questionnaires and store them in secure location.		●

LEGEND: Principal ■ Teacher ●

	Non-SDC		Responsibility Checklist	
STEP 18	Envelope collection	• Have the students label their envelopes and place all assessment materials inside. • Collect the envelopes and store them in secure location.		●
STEP 19	Administration: Day 1 and Day 2	• Hand out the envelopes containing the assessment. • Read the Teacher's Scripts to the students, excluding the italicized parts. • Never leave your room unattended once the materials are distributed. In case of emergency, instruct the students to leave their materials on their desks and to exit immediately. When they return, instruct them to return to work. • Remind the students to plan their time so that they can complete each component. • Do not translate or explain terms. • Do not influence the students' responses. • Do not correct the students' work during the assessment. • As the students work through the assessment, encourage them to attempt all items. All unanswered items will be scored zero. • Have materials and activities available for those who finish early. • At the end of Day 2, collect each of the **booklets** and the **Student Answer Sheets** separately. Remove the materials from the student envelopes.		●

LEGEND: Principal ■ Teacher ●

		Non-SDC	Responsibility Checklist	
STEP 20	In-school marking	• Do not write any comments or make any marks in the booklets. • Do not photocopy students' booklets. • Keep a copy of the Student Answer Sheets.		
STEP 21	Return of assessment materials to principal	• Bundle all Student Answer Sheets. • Bundle all Student Questionnaires. • **Ensure all booklets are removed from the students' envelopes.** • Bundle all completed *Booklet 1*s with an elastic. • Bundle all completed *Booklet 2*s with an elastic. • Bundle the teacher booklets, whether used for in-school marking or not. • Include the completed Teacher Questionnaire. • Bundle all unused student packages. • Include the CTS and the SIFs in the package you return to the principal.		
STEP 22	Preparation of assessment materials for return to EQAO	• Indicate on the Packing/Return List the total quantity of each item being returned. The quantities returned must equal the quantities received by the school. • Photocopy the following and keep the copies on file: – the completed Packing/Return List – the Student Answer Sheets – the CTS for each class – the SIFs (optional) • Keep on file the signed consent forms for the exempted students. • Include the original Packing/Return List with the materials being returned. • Bundle the original Student Answer Sheets for all classes and put them in the Student Answer Sheet envelope.		

LEGEND: Principal Teacher

	Non-SDC		Responsibility Checklist	
STEP 22 Cont'd	Preparation of assessment materials for return to EQAO	• Bundle all *Booklet 1*s together and *Booklet 2*s together. • Place all assessment booklets, Student Answer Sheet envelopes, teacher booklets (whether used for in-school marking or not), Student Questionnaires, Teacher Questionnaires, SIFs, CTSs and unused student packages in the tote box(es) provided. Fill any free space with the original packing material. • Affix the Return Service label(s) to the tote box(es), ensuring that the ID number on the label matches the one on the tote box.	■	
STEP 23	UPS	• Seal the tote box(es) as indicated on the Return Shipping Instructions (UPS). • Call UPS for pickup on completion of the assessment and no later than January 26, 2006: 1-800-742-5877. • Record the date of the pickup and the shipment tracking number. • Keep a copy of UPS waybill.	■	

LEGEND: Principal ■ Teacher ●

Orientation Script

Read the following to your class at least one day before the assessment. This leaves time to answer general questions about the assessment and to have students complete the Student Questionnaires.

- ❑ The Grade 9 Assessment of Mathematics will take place during your math classes on _____, 2006.
- ❑ (*Optional:* Some components will be used for your class mark.)
- ❑ You will work independently.
- ❑ After the assessment is marked, the results will be reported to you and your parents.
- ❑ It is important that you do your best.
- ❑ You will need to bring these supplies to class on the days of the assessment:
  - ❍ sharpened HB pencils,
  - ❍ an eraser,
  - ❍ a ruler and
  - ❍ a scientific calculator or, if you have one, a graphing calculator (you must have at least a scientific calculator).
- ❑ A Formula Sheet will be provided.
- ❑ Bring a book to read in case you finish early.

Distribute the packages. Ensure that the student barcodes on the packages match the numbers assigned on the CTS.

- ❑ Open your packages.
- ❑ You should have the following:
  - ❍ a Student Questionnaire;
  - ❍ a Formula Sheet;
  - ❍ a Student Answer Sheet (excluded for large-print versions);
  - ❍ *Booklet 1;*
  - ❍ *Booklet 2;*
  - ❍ an envelope and
  - ❍ *(for French Immersion classes only)* a *Glossaire de termes mathématiques.*
- ❑ Check to ensure that the last twelve barcode digits are the same on each booklet and on the Student Answer Sheet.

  Let me know if you are missing any items or if your barcodes don't match.

If an item is missing, or there is a barcode mismatch, refer to "The Importance of Barcodes," on page 2.

- ❑ Put the material in the envelope and write your name on the outside.

Student Questionnaire

This may be completed during the orientation on Day 1.

- ❑ Find your copy of the Student Questionnaire.
- ❑ I will read the instructions to you.

Read the following introduction and directions to the students:

This questionnaire should take less than 10 minutes to complete. Its purpose is to gather information about your background and attitudes toward mathematics. The information will help us understand student achievement results. Your responses will remain completely confidential.

Read each question carefully. With a **pencil,** fill in the circle that best describes your response. Make sure the circle is entirely filled in, like this: ●. If no answer seems exactly right, fill in the circle with the response closest to what you want to say. If you wish to change one of your answers, completely erase the error and fill in the appropriate circle.

You may help the students with the questionnaire.

Collect the completed questionnaires, and if you are stopping for the day, ensure the student's name is on his or her envelope, have each student put his or her remaining assessment materials in the envelope, collect the envelopes and store them in a secure location.

Assessment Script

Day 1: *Booklet 1* (50 minutes)

- ❑ We are now starting the first part of the Grade 9 Assessment of Mathematics. It is important that you do your best work. Since this is an assessment, I cannot help you with the questions.
- ❑ Make sure you have the following materials:
  - ❍ an HB pencil and an eraser
  - ❍ a ruler
  - ❍ a scientific or graphing calculator
  - ❍ a Formula Sheet
- ❑ Today you will be working on multiple-choice questions and open-response questions in *Booklet 1*.
- ❑ Take out *Booklet 1* and the Student Answer Sheet.

Ask students to open their booklets to the first page. Have them follow along as you read aloud the section "Answering Multiple-Choice Questions" from your copy of Booklet 1.

Students using large-print versions circle responses in the booklet.

Make sure all students do the sample question and understand how to mark their answers.

Then have the students follow along as you read the section "Answering Open-Response Questions."

Students must not begin the assessment yet.

- ❑ As you work on the open-response questions, remember to show all of your work. Include words, numbers, graphs, diagrams, symbols, charts and/or pictures to explain your thinking.
- ❑ Since someone who does not know your work will mark your assessment, it is important that you answer the questions completely and that you write down the numbers you enter and the operations you carry out if you are using a calculator.

If you will be marking some of the student work, read the following:

- ❑ I will also be reviewing your work on this assessment and will be using some of the questions as part of your mark for the course.
- ❑ We are now ready to begin. Remember to use your pencil and mark your answers to the multiple-choice questions on your Student Answer Sheet. If you are using a large-print version, you will circle the letters for your answers in your booklet.
- ❑ Remember to show your work for the open-response questions.
- ❑ You have 50 minutes to complete *Booklet 1*. I will tell you when 35 minutes have passed.
- ❑ Start now.

After 35 minutes

- ❑ You have 15 minutes left.

After 50 minutes

- ❑ Stop working. Close your booklet.

Collect* Booklet 1.** ***Ask students to put the Student Answer Sheet and the remaining materials in their envelopes. Collect the envelopes. Place the materials in a secure location.

Day 2: *Booklet 2* (50 minutes)

- ❑ Take out *Booklet 2* and the Student Answer Sheet. Make sure you have an HB pencil, an eraser, a ruler, a scientific or graphing calculator and the Formula Sheet.
- ❑ Today you will be working on open-response questions and multiple-choice questions.
- ❑ You have 50 minutes to complete *Booklet 2*. I will tell you when 35 minutes have passed.
- ❑ Start now.

After 35 minutes

- ❑ You have 15 minutes left.

After 50 minutes

- ❑ Stop working. Close your booklet. You have now completed the assessment.

Collect* Booklet 2 *and the Student Answer Sheet separately. Check that all booklets and answer sheets have been removed from the envelopes. The empty envelopes and Formula Sheets can now be reused or recycled.

Appendix A—EQAO Policies

Consistency and Fairness

The consistency of assessment procedures is important to ensuring fairness for all students. Students must work independently in a quiet environment, supervised by teachers trained for the administration of the assessment. Teachers are given a script that must be followed to ensure that a common message is given to all students throughout the province. The conditions of the assessment administration include time allotments as well as limited access to the assessment booklets. Students work on one booklet at a time. The standardization of the assessment content and of the conditions under which the assessment is administered ensure comparable opportunities for students to demonstrate the skills assessed.

Quality Assurance

As part of EQAO's quality assurance procedures, schools may be visited during the assessment by an observer representing EQAO. The observer's responsibility is to monitor the consistency of administration across the province. The observer will notify the school in advance by phone and will present a letter of identification to the principal.

Student Participation, Absences and Lateness

All students enrolled in Grade 9 applied or academic mathematics classes in publicly funded schools must participate.

If students are absent during the assessment, teachers should have these students complete the assessment when they return, if this is possible while the assessment booklets are in the school. Teachers may use the CTS to keep track of the booklets that students have completed.

If a student moves out of the school during the assessment, return all materials to EQAO.

If a student is late for class, teachers should have the student begin the assessment when he or she arrives. If possible, allow late students the full time suggested for each component of the assessment.

Teacher Absences

Teachers who have read the guide and prepared to administer the assessment should work through the entire assessment with the students. In the case of an unavoidable absence, another teacher, under the supervision of the principal, may administer the assessment.

Classroom Assessment of Student Work

Teachers have the option of marking their own students' work on this assessment prior to submitting it to EQAO for centralized marking. This option provides teachers with an opportunity to obtain a sense of their students' achievement, and the evaluation may be used in calculating students' grades for the course (in compliance with Ministry of Education Report Card policies). EQAO recommends that attention be paid to both components (multiple-choice and open-response), instead of one component only.

The marking methodology used is up to the teacher and/or school. No marks are to be placed on student booklets, and student booklets must not be photocopied. All teacher materials used for this marking must be returned to EQAO by the return dates, along with the student materials.

Students Studying Mathematics in French

Students in French Immersion and Extended French programs will participate in the English-language assessment. English/French and French/English glossaries of mathematical terms will be provided.

EQAO Policy on the Duty to Report Child Abuse

Under provincial law, persons dealing with children, including teachers, teaching assistants and principals, have a duty to report suspicions of child abuse to the Children's Aid Society. According to the *Child and Family Services Act*, the duty to report also applies where there are reasonable grounds to suspect patterns of child neglect.

If a teacher, non-teaching staff member, principal or volunteer working as a scribe has reasonable grounds to suspect child abuse or neglect, he or she is obligated to report the suspicion and the information on which it is based directly to the Children's Aid Society. When reporting to the Children's Aid Society, send only the student's writing linked to the suspicion of abuse or neglect. Notify EQAO at 1-888-327-7377 at the same time, indicating which portion of the assessment is in question. Do not send the Children's Aid Society any part of the preprinted assessment. If they require more information, they will contact EQAO.

EQAO has procedures in place to facilitate markers' reporting of suspicions of child abuse.

EQAO Policy on Offensive Language

Student work that contains offensive language or obscene or racist graphic depictions will be reported to the student's principal, so that appropriate action can be taken at the school level. Offensive content may invalidate a student's response.

Reporting to Students and Parents

In the fall of 2006, EQAO will provide an ISR to each student who participated in the assessment. The ISR will indicate an overall level of achievement in mathematics. Samples of student work will be available on the EQAO Web site (www.eqao.com) to assist in the interpretation of reports. Directors of education for each district school board and school authority will receive board and school reports. EQAO will report on student achievement in the province and in school boards in the *Provincial Report*.

Embedded Materials

Note: Field-test questions are embedded in the student booklets. Assessment of these questions will not be included in the students' scores.

Appendix B—EQAO Information

The Education Quality and Accountability Office

EQAO is an arm's-length agency established by the Government of Ontario. Its purpose is to promote greater accountability and better quality in Ontario's publicly funded school system.

The role of EQAO is to

- design and implement a comprehensive program of student assessment within government-established guidelines,
- develop and implement a system for measuring the quality of education in Ontario,
- manage Ontario's participation in national and international assessments,
- promote research in best practices in assessment and accountability,
- conduct quality reviews in co-operation with school boards and
- report to the Minister of Education, the public and the education community on system quality issues, and recommend improvements.

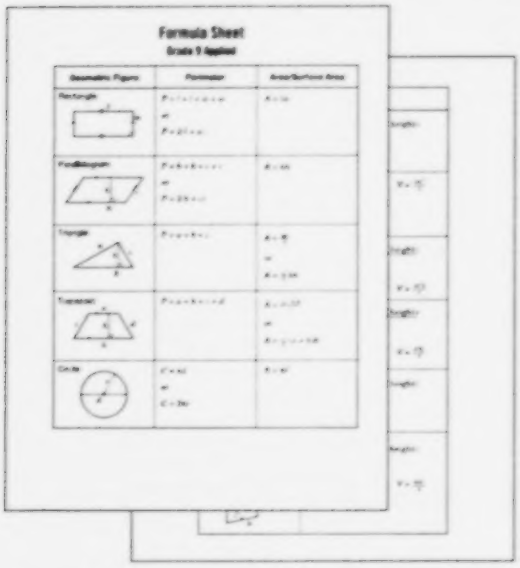
Development of the Assessment

EQAO has developed the assessment in collaboration with teams of Ontario teachers, consultants and principals. These educators have contributed their expertise in mathematics, their knowledge of *The Ontario Curriculum, Grades 9 and 10: Mathematics* (2005), their experience with equity issues, their knowledge concerning students with special needs and their technical knowledge pertaining to validity and reliability.

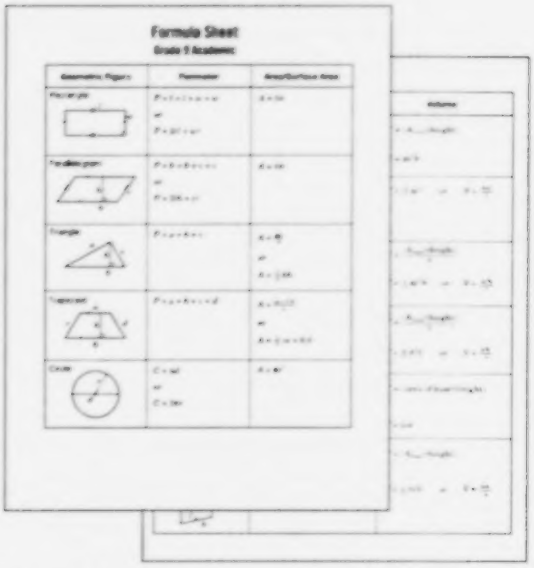
EQAO's commitment to both accountability and improvement has led to the following criteria for the Grade 9 Assessment of Mathematics. The assessment must

- be of high quality, to ensure that reliable information about student achievement is obtained;
- ask students to work independently to complete challenging tasks across the mathematics curriculum;
- give a broad view of students' knowledge and skills in mathematics and
- contribute to student learning.

Appendix C—Formula Sheets and Glossaries for French Immersion



Formula Sheet
Grade 9 Applied



Formula Sheet
Grade 9 Academic

Note: these are all two-sided or multi-page forms.

Glossaire de termes mathématiques : anglais – français, 9e année

Glossaire de termes mathématiques : français – anglais, 9e année

Appendix D—Sample Letters

Students with Individual Education Plans

Note: Editable Microsoft Word versions of these letters are on the secure portion of EQAO's Web site.

Students Receiving Special Provisions

Recommending an Exemption

© 2005 Queen's Printer for Ontario

Education Quality and Accountability Office
2 Carlton Street, Suite 1200
Toronto ON M5B 2M9

Telephone: 1-888-327-7377
Web site: www.eqao.com

Printed on recycled paper.